5

What is claimed is:

- 1. A method of detecting an individual at risk for coronary artery disease comprising: obtaining a biological sample from said individual; and assaying for the level of $\gamma A/\gamma'$ fibrinogen present in said sample, wherein an elevated $\gamma A/\gamma'$ fibrinogen level as compared with that of a person with no risk factor for coronary artery disease, is associated with an increased risk of developing coronary artery disease.
- 10 2. The method of claim 1 wherein the assaying includes the steps of: (a) contacting the biological sample with an antibody reactive only with γΑ/γ' fibrinogen or parts thereof to form a complex; and (b) detecting said complex.
 - 3. The method of claim 2 wherein the antibody is a monoclonal antibody.
 - The method of claim 3 wherein the monoclonal antibody is reactive with the carboxyl terminal twenty amino acids of the γ' chain of γA/γ' fibrinogen.
 - The method of claim 4 wherein the monoclonal antibody binds to SEQ ID NO:1.
 - The method of claim 3 wherein the monoclonal antibody is bound or captured to an antigen in said biological sample.
- 25 7. The method of claim 2 wherein the detecting step further includes the substep of linking or incorporating a label into the antibody.
 - The method of claim 7 wherein the label is a radioisotope-containing amino acid.

25

30

- The method of claim 1 wherein the elevated γA/γ' fibrinogen level is greater than 0.29 mg/ml.
- The method of claim 1 wherein the elevated γA/γ' fibrinogen level is greater than 0.41 mg/ml.
 - 11. A monoclonal antibody which reacts with $\gamma A/\gamma'$ fibrinogen or portions thereof.
- The monoclonal antibody of claim 11 which reacts with the γ' chain of γA/γ' fibringen.
 - 13. The monoclonal antibody of claim 11 that does not cross-react measurably with $\gamma A/\gamma A$ fibringen.
 - 14. The monoclonal antibody of claim 12 which binds the carboxyl terminal twenty amino acids of the γ' chain of $\gamma A/\gamma'$ fibringen.
 - 15. The monoclonal antibody of claim 14 which binds SEQ ID NO:1.
 - 16. A hybridoma that produces antibody molecules that specifically immunoreact with a binding site on $\gamma A / \gamma'$ fibrinogen.
 - 17. A method for detecting in vivo the presence of a γA/γ' fibrinogen receptor comprising the steps of: (a) intravenously administering to an animal subject an effective amount of a monoclonal antibody composition comprising antibody molecules that immunoreact with γA/γ' fibrinogen; (b) maintaining the administered subject for a predetermined time period sufficient for said antibody molecules to immunoreact with said γA/γ' fibrinogen in vivo and form an immunoreaction product; and (c) assaying for the presence of any in vivo

5

10

15

20

immunoreaction product formed in step (b) and thereby the presence of said $\gamma A/\gamma'$ fibrinogen in said subject.

- 18. The method of claim 17 wherein the antibody molecules are administered in an amount sufficient to deliver and produce a blood concentration of antibody molecules of about 0.1-10mM.
- 19. The method of claim 17 wherein the administered subject is maintained for a time sufficient for a substantial amount of any non-reacted antibody molecules to clear the body.
- 20. A kit for determining whether a biological sample contains $\gamma A/\gamma'$ fibrinogen comprising: (a) a monoclonal antibody which reacts with $\gamma A/\gamma'$ fibrinogen or portions thereof to form a complex; and (b) a label or other indicating means capable of signaling the formation of complex.
- 21. The kit of claim 20 wherein the monoclonal antibody reacts with the γ' chain of $\gamma A/\gamma'$ fibrinogen.
- 22. The kit of claim 20 wherein the monoclonal antibody binds the carboxyl terminal twenty amino acids of the γ' chain of $\gamma A/\gamma'$ fibrinogen.
 - The kit of claim 22 which binds SEQ ID NO:1.
- 25 24. The kit of claim 20 further including a specific binding agent.
 - 25. The kit of claim 24 wherein the specific binding agent is selected from the group consisting of antibody molecules, complement proteins, and fragments thereof.
- 30
- 26. The kit of claim 20 wherein the specific binding agent is labeled.